



Pilgrim Nuclear Power Station
600 Rocky Hill Road
Plymouth, MA 02360

July 14, 1999
BEC0 Ltr. 5.99.091

Water Technical Unit (SEW)
U.S. Environmental Protection Agency
P.O. Box 8127
Boston, MA 02114-8127

Massachusetts Dept. of Environmental Protection
Southeast Regional Office
20 Riverside Drive
Lakeville, MA 02347

Discharge Monitoring Report

Dear Sirs:

Enclosed is the Discharge Monitoring Report for Pilgrim Nuclear Power Station (PNPS), NPDES permit number MA0003557 (Federal) and number 359 (State).

The period covered by this report is June, 1999.

Should you have any questions on this report, please direct them to our Principal Marine Biologist, Mr. Robert Anderson, at (508) 830-7935.

Respectfully,

J.F. Alexander
Nuclear Assessment
Group Manager

RDA/clg

Attachments: 1. Summary
2. Discharge Monitoring Report

cc: U. S. Nuclear Regulatory Commission
Document Control Desk
Washington, DC 20555

Senior NRC Resident Inspector
Pilgrim Nuclear Power Station

U. S. Nuclear Regulatory Commission
Region I
475 Allendale Road
King of Prussia, PA 19406

9907210104 990630
PDR ADOCK 05000293
R PDR

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ATTACHMENT 1 TO BECo LETTER 5.99.091

SUMMARY

PILGRIM I DISCHARGE MONITORING REPORT

In accordance with the Federal Clean Water Act, as amended (33USC 1251 et seq: the "CWA"), and the Massachusetts Clean Water Act, as amended (M.G.L.; Chap. 21, 26-53), regarding effluent limitations, monitoring requirements and other conditions set forth in the Pilgrim NPDES permit (Federal Permit Number MA0003557, and State Permit Number 359), Parts I and II, the following information is submitted for the period June, 1999.

I. Discharge Points Covered in this Report

<u>Discharge Point</u>	<u>Discharge Identification</u>
001	Condenser Cooling Water
002	Thermal Backwash for Biofouling Control
003	Intake Screen Wash
004, 005, 006, and 007	Yard Drains (April and September)
008	Sea Foam Suppression
010	Service Cooling Water
011	Makeup Water and Demineralizer Waste Discharge

II. Summary and Notes of Discharge Report

- A. The flows at points 001 and 010 are calculated from system pump capacity and are equal to the total for all pumps in each system running at full capacity for a 24-hour period. The flow at 011 is measured by noting sump levels before and after discharge. Flow at point 002 is a conservative figure obtained by calculating flow if backwashing took place for 24 hours. Flows at points 003 and 008 are calculated from system pump capacity and mean operating time.
- B. The temperatures at points 001 and 002 are measured by resistance temperature detectors (RTD's).
- C. Periodically, total residual chlorine (TRC) concentration in the service cooling water (010) exceeds permit requirements (0.50 ppm daily average TRC and 1.00 ppm daily maximum TRC) prior to mixing with any other stream, primarily because of the number of service water pumps in operation. Chlorine injection levels are lowered as a corrective measure. The dilution provided by the PNPS circulating water flow keeps total residual chlorine concentrations discharged to Cape Cod Bay below the NPDES permit limit of 0.1 ppm.
- D. For stormwater outfalls 004, 005, 006 and 007, samples are collected by grab sampling. Samples are handled and stored in accordance with 40 CFR 136. No additional inputs to these stormwater outfalls occur downstream of the sampling locations.

- E. Intake traveling water screens were operated with dechlorination pumps on in June.
- F. No sawdust was applied to seek and seal PNPS condenser leaks in June, 1999.
- G. The following boron and sodium nitrite discharges (ppm) occurred in June, 1999 from discharge point #001.

<u>Date</u> <u>Discharged</u>	<u>Gallons</u> <u>Discharged</u>	<u>Concentration</u> <u>Before Discharge</u>	<u>Concentration</u> <u>Discharged</u>
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Boron

None

Sodium Nitrite

None

ATTACHMENT 2 to BECo LETTER 5.99.091

DISCHARGE MONITORING REPORT

NAME BOSTON ED #1 PILGRIM PLANT

ADDRESS ROCKY HILL ROAD

RFD #1

PLYMOUTH

FACILITY PILGRIM NUCLEAR POWER STATION

LOCATION PLYMOUTH

ATTN: C.S. GODDARD, PLANT MANAGER

MA 02360

MA 02360

DISCHARGE MONITORING REPORT (DMR)

PERMIT NUMBER

MA0003557

MONITORING PERIOD

YEAR 99 MO 06 DAY 01 TO YEAR 99 MO 06 DAY 30

MAJOR (SUBR 5)
F - FINAL
CONDENSER COOLING WATER

NO DISCHARGE

NOTE: Read instructions before completing this form.

PARAMETER (32-37)	SAMPLE MEASUREMENT PERMIT REQUIREMENT	QUANTITY OR LOADING (46-53)			QUANTITY OR CONCENTRATION (54-61)			UNITS	NO. EX (62-63)	FREQUENCY OF ANALYSIS (64-68)	SAMPLE TYPE (69-70)
		AVERAGE	MAXIMUM	UNITS	MINIMUM	AVERAGE	MAXIMUM				
TEMPERATURE, WATER	SAMPLE MEASUREMENT										
DEG. FAHRENHEIT	PERMIT										
00011 1 0 0	REQUIREMENT										
EFFLUENT GROSS VALUE											
OXIDANTS, TOTAL	SAMPLE MEASUREMENT										
RESIDUAL	PERMIT										
34004 1 0 0	REQUIREMENT										
EFFLUENT GROSS VALUE											
FLOW, IN CONDUIT OR	SAMPLE MEASUREMENT										
THRU TREATMENT PLANT	PERMIT										
50050 1 0 0	REQUIREMENT										
EFFLUENT GROSS VALUE											
TEMP. DIFF. BETWEEN	SAMPLE MEASUREMENT										
INTAKE AND DISCHARGE	PERMIT										
61576 1 0 0	REQUIREMENT										
EFFLUENT GROSS VALUE											
	SAMPLE MEASUREMENT										
	PERMIT										
	REQUIREMENT										
	SAMPLE MEASUREMENT										
	PERMIT										
	REQUIREMENT										
	SAMPLE MEASUREMENT										
	PERMIT										
	REQUIREMENT										

NAME/TITLE PRINCIPAL EXECUTIVE OFFICER

C.S. GODDARD
PLANT MANAGER

TYPED OR PRINTED

I CERTIFY UNDER PENALTY OF LAW THAT I HAVE PERSONALLY EXAMINED AND AM FAMILIAR WITH THE INFORMATION SUBMITTED HEREIN, AND BASED ON MY INQUIRY OF THOSE INDIVIDUALS IMMEDIATELY RESPONSIBLE FOR OBTAINING THE INFORMATION, I BELIEVE THE SUBMITTED INFORMATION IS TRUE, ACCURATE AND COMPLETE. I AM AWARE THAT THERE ARE SIGNIFICANT PENALTIES FOR SUBMITTING FALSE INFORMATION, INCLUDING THE POSSIBILITY OF FINE AND IMPRISONMENT. SEE 18 U.S.C. § 1001 AND 33 U.S.C. § 1319. (Penalties under these statutes may include fines up to \$10,000 and or maximum imprisonment of between 6 months and 5 years.)

SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT

TELEPHONE

DATE

508 830-8100

99 7 13

COMMENTS AND EXPLANATION OF ANY VIOLATIONS (Reference all attachments here)

PH SHALL NOT VARY MORE THAN 0.5 PH STANDARD UNITS FROM INTAKE WATER. SEE PERMIT PAGE 5 PARAGRAPHS 6EN PO
R BROWN AND SODIUM NITRATE REPORTING REQUIREMENTS. ATTACH ALL RELATED REPORTS TO THIS FORM. A BARRIER
WCT SHALL BE MAINTAINED AT THE THERMAL END OF DISCHARGE CANAL AT ALL TIMES.
EPA Form 3320-1 (08-95) Previous editions may not be used.

NAME
BOSTON ED #1 PILGRIM PLANT

ADDRESS ROCKY HILL ROAD

RFD #1

PLYMOUTH
MA 02360

FACILITY
PILGRIM NUCLEAR POWER STATION

LOCATION PLYMOUTH MA 02360

ATTN: C.S. GODDARD, PLANT MANAGER

MA0003557	PERMIT NUMBER
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002 1	DISCHARGE NUMBER
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MONITORING PERIOD

YEAR	MO	DAY	TO	YEAR	MO	DAY
99	06	01		99	06	30

FROM

*** NO DISCHARGE ***

NOTE: Read Instructions before completing this form.

[illegible]

COMMENTS AND EXPLANATION OF ANY VIOLATIONS (Reference all attachments here)

THE PH SHALL NOT VARY MORE THAN 0.5 STANDARD UNITS FROM THAT OF THE INTAKE WATER. FLOW RATE IS TO BE ESTIMATED AS IF BACKFLUSHING TOOK PLACE FOR 24 CONTINUOUS HOURS. SEE PERMIT PAGE 8 FOR CONDITIONS REGARDING THE

~~FREQUENCY OF DISCHARGE~~

(REPLACES EPA FORM T-40 WHICH MAY NOT BE USED.)

PAGE 1 OF 1

NAME BOSTON ED #1 PILGRIM PLANT
ADDRESS ROCKY HILL ROAD

RFD #1

PLYMOUTH
MA 02360

FACILITY PILGRIM NUCLEAR POWER STATION
LOCATION PLYMOUTH MA 023

ATTN: C.S. GODDARD, PLANT MANAGER

HA0003557	PERMIT NUMBER
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002 1	DISCHARGE NUMBER
-------	------------------

MAJOR
(SUBR 5)
F - FINAL
THERMAL R

MONITORING PERIOD

YEAR	MO	DAY	TO	YEAR	MO	DAY
99	06	01		99	06	30

FROM

99	06	30
(26-27)	(28-29)	(30-31)

*** NO DISCHARGE ***

NOTE: Read Instructions before completing this form.

[illegible]

COMMENTS AND EXPLANATION OF ANY VIOLATIONS (Reference all attachments here)

THE PH SHALL NOT VARY MORE THAN 0.5 STANDARD UNITS FROM THAT OF THE INTAKE WATER. FLOW RATE IS TO BE ESTIMATED AS IF BACKFLUSHING TOOK PLACE FOR 24 CONTINUOUS HOURS. SEE PERMIT PAGE 8 FOR CONDITIONS REGARDING THE

~~PROPERTY OF AGENCY~~

(REPLACES EPA FORM T-40 WHICH MAY NOT BE USED.)

PAGE 1 OF 1

PERMITTEE NAME/ADDRESS (Include Facility Name/Location if Different)
NAME BOSTON ED 31 PILGRIM PLANT
ADDRESS ROCKY HILL ROAD

PLYMOUTH MA 02360
FACILITY PILGRIM NUCLEAR POWER STATION
LOCATION PLYMOUTH MA 02360
ATTN: C.S GODDARD, PLANT MANAGER

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES)
DISCHARGE MONITORING REPORT (DMR)
(2-16) (17-1g)

MA0003557
PERMIT NUMBER

008 A	DISCHARGE NUMBER
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MONITORING PERIOD					
YEAR	MO	DAY	YEAR	MO	DAY
99	06	01	99	06	30

SEA FOAM SUPPRESSION DISCHARGE

*** NO DISCHARGE ***

NOTE: Read Instructions before completing this form.

PARAMETER (32-37)	X	QUANTITY OR LOADING (46-53)				QUANTITY OR CONCENTRATION (54-61)				NO. EX (62-63)	FREQUENCY OF ANALYSIS (64-68)	SAMPLE TYPE (69-70)
		AVERAGE	MAXIMUM	UNITS	MINIMUM	AVERAGE	MAXIMUM	UNITS				
FLOW, IN CONDUIT OR THRU TREATMENT PLANT 50050 1 0 0	SAMPLE MEASUREMENT	C	C	(03)	*****	*****	*****					
	PERMIT REQUIREMENT	0.73 NO AVG	0.73 DAILY MX	MGD	*****	*****	*****			0 01/01	ES	
EFFLUENT GROSS VALUE	SAMPLE MEASUREMENT			MGD	*****	*****	*****			DAILY ESTIMATE		
	PERMIT REQUIREMENT											
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